

# Stanyl® TW200F8

## Property Data

PA46-GF40

40% Glass Reinforced, Heat Stabilized

Properties	Typical Data	Unit	Test Method
<b>RHEOLOGICAL PROPERTIES</b>			
	dry / cond		
Molding shrinkage [parallel]	0.5 / *	%	Sim. to ISO 294-4
Molding shrinkage [normal]	1.1 / *	%	Sim. to ISO 294-4
<b>MECHANICAL PROPERTIES</b>			
	dry / cond		
Tensile modulus	13000 / 8000	MPa	ISO 527-1/-2
Tensile modulus (120°C)	6900	MPa	ISO 527-1/-2
Tensile modulus (160°C)	6100	MPa	ISO 527-1/-2
Tensile modulus (180°C)	5700	MPa	ISO 527-1/-2
Tensile modulus (200°C)	5300	MPa	ISO 527-1/-2
Stress at break	230 / 140	MPa	ISO 527-1/-2
Stress at break (120°C)	130	MPa	ISO 527-1/-2
Stress at break (160°C)	115	MPa	ISO 527-1/-2
Stress at break (180°C)	105	MPa	ISO 527-1/-2
Stress at break (200°C)	100	MPa	ISO 527-1/-2
Strain at break	3 / 6	%	ISO 527-1/-2
Strain at break (120°C)	6.5	%	ISO 527-1/-2
Strain at break (160°C)	6.5	%	ISO 527-1/-2
Strain at break (180°C)	6.5	%	ISO 527-1/-2
Strain at break (200°C)	6.5	%	ISO 527-1/-2
Flexural modulus	11500 / 7000	MPa	ISO 178
Flexural modulus (120°C)	5800	MPa	ISO 178
Flexural modulus (160°C)	5200	MPa	ISO 178
Charpy impact strength (+23°C)	95 / 100	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy impact strength (-30°C)	75 / 85	kJ/m <sup>2</sup>	ISO 179/1eU
Charpy notched impact strength (+23°C)	14 / 21	kJ/m <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength (-30°C)	12 / 12	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength (23°C)	14 / 21	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength (-40°C)	12 / 12	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL PROPERTIES</b>			
	dry / cond		
Melting temperature (10°C/min)	295 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	290 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel)	0.25 / *	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal)	0.5 / *	E-4/°C	ISO 11359-1/-2
Burning Behav. at 1.5 mm nom. thickn.	HB / *	class	IEC 60695-11-10
Thickness tested	1.6 / *	mm	IEC 60695-11-10
Burning Behav. at thickness h	HB / *	class	IEC 60695-11-10
Thickness tested	0.9 / *	mm	IEC 60695-11-10
Thermal Index 5000 hrs	177	°C	IEC 60216/ISO 527-1/-2

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## ELECTRICAL PROPERTIES

dry / cond

Volume resistivity	<b>1E12 / 1E8</b>	Ohm*m	IEC 60093
Electric strength	<b>30 / 20</b>	kV/mm	IEC 60243-1
Comparative tracking index	<b>300 / -</b>	-	IEC 60112

## OTHER PROPERTIES

dry / cond

Humidity absorption	<b>2.2 / *</b>	%	Sim. to ISO 62
Density	<b>1510 / -</b>	kg/m <sup>3</sup>	ISO 1183

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